nerally found, that lands moſt ſubject to ſtagnant ponds, have but a ſhallow ſtratum of clay, over the ſand.

All that is neceſſary, therefore, is to dig a pit in the bottom of the pond, till you arrive at this ſtratum of ſand, when the water will be immediately abſorbed, and the pond emptied. Should there be too much water to permit a hole to be dug within the pond, it may be made at the edge of it, the communication afterwards made by a trench. It would be prudent not to make the ſides of the pit ſo ſteep, as to prevent cattle from getting out, ſhould they happen to go in.

The writer does not pretend to be the original author of this invention; the idea was ſuggeſted to him, by ſeeing it practiſed by a farmer, who enjoyed the benefit, though he did not appear to know the cauſe

N°. XXXVII.

Obſervations on the ſeverity of the winter 1779, 1780, *by the Rev.* MATHEW WILSON *of Lewis, dated 22d June* 1780.

Read June 1781. THE extreme cold made great devaſtations on the animal and vegetable kingdoms. Such obſervations as were in my power to make, are,

1. The moles generally periſhed, many were found dead above ground.

2. The bees are almoſt all deſtroyed, but few hives have eſcaped.

3. The frogs ſuffered greatly, it is ſuppoſed that at leaſt two thirds of the ſpecies were cut off.

4. Our ſhell fiſh of all kinds, that run in ſhoal waters, were deſtroyed; after the thaw the air was infected by their putrifaction.

5. Bugs

5. Bugs, muſketoes, &c. &c. have generally died.

6. The graſshoppers I ſuſpect are gone, not having yet ſeen any.

7. Some ſnakes yet live, but they are not ſo numerous as formerly.

A multiplicity of buſineſs prevented me from extending theſe obſervations; but if I had had leaſure, I ſhould doubtleſs have diſcovered many more animals and inſects that ſuffered from the ſame cauſe.

8. I muſt add ſomething remarkable reſpecting fiſh, though I know not whether to refer it to the cold or ſome other cauſe.

From 14th to 24th of May after continued eaſterly winds, fiſh were driven on the coaſt in ſuch abundance that in Rehoboth only two or three hundred buſhels were daily collected and eaten by the people. Some ſeemed at firſt to be alive, but far the greater part were dead, and many had one eye picked out by the birds while floating on the water. The ſound, or air bladder, of them all was remarkably diſtended, ſo that they could not ſink in the water; this ſeemed to be the cauſe of their death. Theſe fiſh were generally ſea crocus, a few cats and ſome ſea trout.

The vegetable ſeems to have ſuffered more than the animal kingdom.

Roſemary, of which there were many large and flouriſhing hedges, is totally extinct.

The *Pink* is deſtroyed, except a few ſmall roots, covered with leaves, in narrow places.

Grape Vines both native and foreign are killed, except where they were ſheltered from the winds.

Moſt of the ever greens, the ſmall *Laurel*, the *Holly*, the *Juniper*, *Bear buſhes* and ſome ſmall *pines* have ſuffered in the general calamity; and what is ſtill more remarkable

ble many young *black oaks* and ſome *white oaks* from twelve feet high and under are dead, in bleak places.

Sage, *Rue*, *Lavender*, *Prickley pears*, *Southern wood* and *Silk graſs* (a ſpecies of the Aloes) are dead to the roots. *Comfrey roots and Parſley* are much damaged, and the *Catauba* tree is killed in all its ſmaller branches. Two thirds of the *Wheat* and *Rye* in our country are loſt, and *Hoar hound*, which generally grows all winter, is deſtroyed.

In the ſalt marſhes I found the large *triangular graſs* and the *bent graſs* generally dead from the roots. The marſh at preſent (June) looks red and ſeems rotten.

N. XXXIX.

A Deſcription of a new Standard for Weights and Meaſures, (in a Letter from Mr. JOHN COOKE, *of Tipperary in Ireland, to* THOMAS JEFFERSON, ESQ.

Dated Mar. 28, 1791. THE want of uniformity in weights and meaſures is a ſubject of general complaint at preſent; it is an infinite ſource of fraud, and the great obſtacle to domeſtic and foreign commerce.

The firſt ſtep neceſſary to remove this evil, is to appoint an univerſal, perpetual, and immutable ſtandard, for length, ſuperficies, weight, and capacity; whereby the inſtruments of meaſurement may be adjuſted, and alſo whereby they may be deſcribed to diſtant countries, and to future ages.

Natural ſubſtances are incapable of furniſhing one of this deſcription. Every thing in the material world is in a ſtate of gradual alteration, it differs from itſelf under different circumſtances, and differs from every individual of the ſame ſpecies.

General